

**REMARKS**

By this amendment, the Applicants include new claim 7. Therefore, on entering this amendment, claims 1-7 are pending in the application.

The Examiner has accepted the drawings filed on October 20, 2003 and has acknowledged the claim to foreign priority and confirmed that the certified copy of the priority document was received.

The Specification is objected to by the Examiner.

The Information Disclosure Statement filed October 20, 2003 is objected to by the Examiner.

Claims 1-6 are rejected under 35 U.S.C. § 102(b) as being anticipated by Markley et al., “Attitude Control System Conceptual Design for Geostationary Operational Environmental Satellite Spacecraft Series.”

The Applicants traverse the rejections and request reconsideration.

***Formal Matters***

The Examiner has not considered the IDS filed on October 20, 2003, as it allegedly fails to include a statement of relevance. The Applicant respectfully disagrees with the Examiner’s position. Along with the IDS, the Applicants included a copy of the search report received from the French patent office with the references duly categorized and associated with individual claims. A translation sheet which includes the relevant French words in the search report

translated into English was also included. This is believed to be sufficient to comply with the requirements of 37 CFR 1098(a)(3).

***Objections to the Specification***

In the Specification, the Applicants refer to publications that provide background information. The Applicants have and will continue to comply with the duty of disclosure and file appropriate Information Disclosure Statements as necessary.

***Rejections under section 112***

The Applicants respectfully amend the claims to overcome the grounds for the rejection of the claims under section 112, second paragraph.

***Rejection of claims 1-6 under section 102(b) based on Markley***

The present invention requires gyroscopic actuators for supplying the torque necessary for maintaining the attitude of a geostationary satellite. The Examiner incorrectly contends that Markley discloses **gyroscopic actuators**. While Markley discloses an attitude control system for geostationary satellites, **it does not disclose using gyroscopic actuators**. In fact, it simple uses conventional gimbal drives and servos for actuation.

Gyros are used in Markley to merely sense and detect the attitude of the geostationary satellite as part of an overall control system. Based on the attitude that is detected by the gyros, error signals are generated which are then used to determine a correction signal that is fed forward to the instruments servos as a real-time gimbal correction to compensate for the residual motion(see Markley p. 251, col. 1, 2<sup>nd</sup> paragraph).

The present invention **uses gyroscopes as actuators for providing the necessary torque for maintaining the attitude.** Markley does not disclose (or suggest) the use of gyros for anything other than sensing the attenuation. In other words, Markley does not disclose (or suggest) gyroscopic actuators for supplying the torque necessary for maintaining the attitude of a geostationary satellite.

Further, by suggesting a completely different solution and the structure therein, Markey teaches away from the present invention. Therefore, a skilled artisan would not have found it obvious to adopt the gyroscopes in Markey to provide the torque necessary for maintaining the attitude of a satellite since Markey already suggests a completely different attitude correction technique.

To anticipate a claim, all the elements and their associated limitations must be disclosed in the cited references. Markley does not anticipate claims 1-6 at least because it does not disclose gyroscopic actuators for providing torque necessary for maintaining the attitude.

*New claims*

Claim 7, which depends on claim 6, has been newly added for examination.

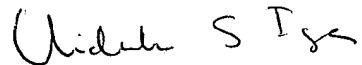
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

Amendment under 37 C.F.R. § 1.111  
U.S. Application No.: 10/687,585

Attorney Docket No.: Q77958

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,



Chid S. Iyer  
Registration No. 43,355

SUGHRUE MION, PLLC  
Telephone: (202) 293-7060  
Facsimile: (202) 293-7860

WASHINGTON OFFICE

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